## SEQUENCE LISTING <110> SOUTHERN, EDWIN <120> ANALYZING POLYNUCLEOTIDE SEQUENCES <130> 2004-0200/wMC/01779 <140> 10/772,467 <141> 2004-02-06 <150> 09/422,803 <151> 1999-10-22 <150> 08/925,676 <151> 1997-09-09 <150> 08/230,012 <151> 1994-04-19 <150> 07/695,682 <151> 1991-05-03 <150> 07/753,317 <151> 1990-09-28 <150> PCT/GB89/00460 <151> 1989-05-02 <160> 76 <170> PatentIn Ver. 2.1 <210> 1 <211> 12 <212> DNA <213> Artificial Sequence <223> Description of Artificial Sequence: Synthetic Oligonucleotide <400> 1 12 aggtcgccgc cc <210> 2 <211> 12 <212> DNA <213> Artificial Sequence <223> Description of Artificial Sequence: Synthetic Oligonucleotide <400> 2 12 aggtctccgc cc

<210> 3 <211> 12 <212> DNA <213> Artificial Sequence

<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 3 gggcggcgac ct	12
<210> 4 <211> 19 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 4 ctcctgagga gaagtctgc	19
<210> 5 <211> 15 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 5 gaggactcct ctacg	15
<210> 6 <211> 16 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 6 gaggactcct ctgacg	16
<210> 7 <211> 17 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 7 gaggactcct ctagacg	17
<210> 8 <211> 18 <212> DNA <213> Artificial Sequence	

<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> gagga	8 ctcct ctcagacg			18
<210> <211> <212> <213>	19			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> gagga	9 ctcct cttcagacg			19
<210> <211> <212> <213>	18			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> aggact	10 ccctc ttcagacg			18
<210> <211> <212> <213>	17			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> ggacto	11 cctct tcagacg			17
<210> <211> <212> <213>	16			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> gactco	12 ctctt cagacg		:	16
<210> <211> <212>	15			

<213> /	Artificial Sequence			
<220> <223> I	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> 3	13 cttc agacg			15
<210> : <211> : <212> ! <213> /	14			
<220> <223> I	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> :	14 ttca gacg			14
<210> (211> ) (211> ) (212> ) (213> )	13			
<220> <223> I	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> 1 tcctct	15 tcag acg			13
<210> 1 <211> 1 <212> 1 <213> 7	12			
<220> <223> [	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	16 caga cg			12
<210> 1 <211> 1 <212> 1 <213> 4	15			
<220> <223> [	Description of Artificial Diigonucleotide	Sequence:	Synthetic	
<400> 1 gaggaca	17 acct ctacg		5	15
<210> 1 1	18 16			

<212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 18 gacgacacct ctgacg	16
<210> 19 <211> 17 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 19 gacgacacct ctagacg	17
<210> 20 <211> 18 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 20 gaggacacct ctcagacg	18
<210> 21 <211> 19 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 21 gaggacacct cttcagacg	19
<210> 22 <211> 18 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 22 aggacacctc ttcagacg	18
<210> 23	

<211> 17 <212> DN <213> Ar				
<220> <223> De ol	escription of Artificial igonucleotide	Sequence:	Synthetic	
<400> 23 ggacacct	ct tcagacg		1	L7
<210> 24 <211> 16 <212> DN <213> Ar	5			
	escription of Artificial igonucleotide	Sequence:	Synthetic	
<400> 24 gacaccto	tt cagacg		1	L6
<210> 25 <211> 15 <212> DN <213> Ar	, 1			
<220> <223> De o1	escription of Artificial igonucleotide	Sequence:	Synthetic	
<400> 25 acacctct	tc agacg		1	L5
<210> 26 <211> 14 <212> DN <213> Ar				
<220> <223> De o1	scription of Artificial igonucleotide	Sequence:	Synthetic	
<400> 26 cacctctt			1	L4
<210> 27 <211> 13 <212> DN <213> Ar				
<220> <223> De 01	scription of Artificial igonucleotide	Sequence:	Synthetic	
<400> 27			1	3

<210> <211> <212> <213>	12		
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic
<400> cctctt	28 caga cg		12
<210> <211> <212> <213>	10		
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic
<400> gaggat			10
<210> <211> <212> <213>	11		
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic
<400> gaggat	30 ctcct c		11
<210> <211> <212> <213>	12		
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic
<400> gaggat	31 tcct ct		12
<210> <211> <212> <213>	$\overline{13}$		
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic
<400>	32 tcct_ctt		13

<210><211><212><213>	14			
<220> <223>	Description of Artificial S Oligonucleotide	Sequence:	Synthetic	
<400> gagga	33 ttcct cttc			14
<210> <211> <212> <213>	15			
<220> <223>	Description of Artificial S Oligonucleotide	Sequence:	Synthetic	
<400> gagga	34 ttcct cttca			15
<210> <211> <212> <213>	16			
<220> <223>	Description of Artificial S Oligonucleotide	Sequence:	Synthetic	
<400> gagga	35 ttcct cttcag			16
<210> <211> <212> <213>	17			
<220> <223>	Description of Artificial S Oligonucleotide	equence:	Synthetic	
<400> gagga	36 ttcct cttcaga		:	17
<210> <211> <212> <213>	18			
<220> <223>	Description of Artificial So Oligonucleotide	equence:	Synthetic	
<400> gagga1	37 ttcct cttcagac	8	8	18

<210> <211> <212> <213>	19		
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic
<400> gagga	38 ttcct cttcagacg		19
<210> <211> <212> <213>	18		
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic
<400> aggat	39 tcctc ttcagacg		18
<210> <211> <212> <213>	17		
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic
<400> ggatt	40 cctct tcagacg		17
<210> <211> <212> <213>	16		
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic
<400> gattc	41 ctctt cagacg		16
<210> <211> <212> <213>	15		
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic
<400>	42		

attcc <sup>-</sup>	tcttc agacg			12
<210> <211> <212> <213>	14			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> ttcct	43 cttca gacg			14
<210> <211> <212> <213>	13			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> tcctc	44 ttcag acg			13
<210> <211> <212> <213>	10			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> gagga				10
<210> <211> <212> <213>	11			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> gagga	46 ctcct c			11
<210> <211> <212> <213>	12			
<220> <223>	Description of Artificial	Sequence:	Synthetic	

<400> 47 gaggactcct ct	12
<210> 48 <211> 13 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 48 gaggactcct ctt	13
<210> 49 <211> 14 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 49 gaggactcct cttc	14
<210> 50 <211> 15 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 50 gaggactcct cttca	15
<210> 51 <211> 16 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 51 gaggactcct cttcag	16
<210> 52 <211> 17 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	

<400> 52 gaggactcct cttcaga	17
<210> 53 <211> 18 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 53 gaggactcct cttcagac	18
<210> 54 <211> 19 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 54 gaggactcct cttcagacg	19
<210> 55 <211> 18 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 55 aggactcctc ttcagacg	18
<210> 56 <211> 17 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 56 ggactcctct tcagacg	17
<210> 57 <211> 16 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic	

## Oligonucleotide <400> 57 gactcctctt cagacg 16 <210> 58 <211> 15 <212> DNA <213> Artificial Sequence <223> Description of Artificial Sequence: Synthetic Oligonucleotide <400> 58 15 actcctcttc agacg <210> 59 <211> 14 <212> DNA <213> Artificial Sequence <220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide <400> 59 ctcctcttca gacg 14 <210> 60 <211> 13 <212> DNA <213> Artificial Sequence <220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide <400> 60 tcctcttcag acg 13 <210> 61 <211> 10 <212> DNA <213> Artificial Sequence <220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide <400> 61 gaggacacct 10

<210> 62 <211> 11 <212> DNA <213> Artificial Sequence <220>

<223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> gaggad	62 cacct c		1	L <b>1</b>
<210> <211> <212> <213>	12			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> gagga	63 cacct ct		1	L2
<210> <211> <212> <213>	13			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> gaggad	64 cacct ctt		1	L3
<210> <211> <212> <213>	14			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> gaggad	65 cacct cttc		1	L <b>4</b>
<210> <211> <212> <213>	15			
<220> <223>	Description of Artificial Oligonucleotide	Sequence:	Synthetic	
<400> gaggad	66 cacct cttca		1	.5
<210><211><211><212><213>	16			

<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 67 gaggacacct cttcag	16
<210> 68 <211> 17 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 68 gaggacacct cttcaga	17
<210> 69 <211> 18 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 69 gaggacacct cttcagac	18
<210> 70 <211> 19 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 70 gaggacacct cttcagacg	19
<210> 71 <211> 18 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Oligonucleotide	
<400> 71 aggacacctc ttcagacg	18
<210> 72 <211> 17 <212> DNA <213> Artificial Sequence	

<pre>&lt;220&gt; &lt;223&gt; Description of Artificial Sequen    Oligonucleotide</pre>	ce: Synthetic
<400> 72 ggacacctct tcagacg	17
<210> 73 <211> 16 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequen Oligonucleotide	ce: Synthetic
<400> 73 gacacctctt cagacg	16
<210> 74 <211> 15 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequen Oligonucleotide	ce: Synthetic
<400> 74 acacctcttc agacg	15
<210> 75 <211> 14 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequen Oligonucleotide	ce: Synthetic
<400> 75 cacctcttca gacg	14
<210> 76 <211> 13 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequen Oligonucleotide	ce: Synthetic
<400> 76 acctcttcag acg	13